

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

[0026] **Figure 1** shows substrate 110 having surface 105 and area 120 for bonding of a circuit chip or die. Overlying area 120 on surface 105 is die-attach adhesive 130 to connect a die to substrate 110. **Figure 2** shows a top view of substrate 110, showing surface 105. **Figure 2** shows first contacts 140 positioned around a periphery of substrate 110. **Figure 2** also shows area 120 that will accommodate a chip or die. Disposed along a periphery of area 120, in this embodiment, are second contacts 150 that may be used to electrically connect a chip or die to substrate 110. Second contact points 150 are intended to be connected through wire bonds to contact points on a chip or die over area 120 of substrate 110. Although a package incorporating a wire-bonded die is described, the teachings apply equally to other electrical bonding systems, such as flip chip systems that may use solder to connect a die to a substrate. **Figure 2** also shows die-attach adhesive 130 covering area 120. Representative die attach adhesives include film and paste materials as commonly used in the field. An example of a suitable film die attach is DF 402[""]™ available from Hitachi Chemical Company, Ltd., and a suitable die attach paste is 2025[""]™ from Ablestick Corporation of Seoul, Korea

[0029] Solder balls are attached to substrate via, for example, a stencil printing processes whereby flux material is printed onto substrate contact pads upon which solder balls are placed. A suitable flux material is Kester TSF-6502[""]™ from Kester Corporation of Des Plaines, Illinois and suitable ball placement equipment is a Vanguard 5020 BGA ball attach machine available from RVSI Vanguard Corporation of Tucson, Arizona.

[0031] **Figure 6** shows the structure of **Figure 4** and **Figure 5** and illustrates the dispensing of encapsulant material. In this embodiment, encapsulant material 190 is dispensed through stencil 195. Stencil 195 acts a dam to allow encapsulant material to be introduced on die 160 and wire bonds 170 under low pressure, and low speed and laminar flow. Stencil 195 has an opening, in one embodiment, of similar shape but slightly smaller (e.g., 50 percent smaller) than area 120 on substrate 110. Encapsulant flows, in this embodiment, on die 160 and around fusible masses 180. A suitable process for introducing encapsulant 190 is the STENSEAL[""]™

process developed by DEK Printing Machines Ltd., of Weymouth, England and Kulicke and Soffa (K&S) of Willow Grove, Pennsylvania. Suitable encapsulants include polymeric materials known as thermosetting epoxies. Preferably, these materials are biphenyl, phenyl epoxy and similar resin chemistries that are cured by amine, anhydride or similar materials. Various properties include viscosity, filler package, and curing chemistries. Suitable materials have viscosity in the range of 10-30 Pa-s, 0 to 70 percent filler concentration (by weight), and cure temperature between 40 to 180[[i]]°C.